

## **Description of Additional Supplementary Files**

**File Name:** Supplementary Data 1

**Description:** RNAseq analysis in L4 *C. elegans*.

**File Name:** Supplementary Data 2

**Description:** Lifespan quartile comparisons.

**File Name:** Supplementary Data 3

**Description:** Thrashing replicates at each life stage.

**File Name:** Supplementary Data 4

**Description:** Bacterial diet as a nutraceutical Log-rank analysis compared to OP50, Red, and Orange.

**File Name:** Supplementary Data 5

**Description:** Graph and chart source data in all main figures.